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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/449,907 12/02/99 SAKAMOTO

T P7176-9004

EXAMINER

QM32/0531

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ART UNIT

PAPER NUMBER

3723

DATE MAILED:

05/31/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/449,907

Applicant(s)

SAKAMOTO ET AL.

Examiner

Dung V Nguyen

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 6 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 5 is/are allowed.
- 6) ☒ Claim(s) 1 and 4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on 11 May 2001 is: a) ☒ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Amsden et al.

Amsden et al disclose a polishing cloth 10 for chemically mechanically polishing a workpiece comprising polishing projections 14 having polishing faces arranged to come in contact with a workpiece for polishing the same, polishing agent passages 16, having bottoms, for introducing a polishing agent and one-stage step portions 19 formed between the polishing faces of the polishing projections and the bottoms of the polishing agent passages (note Fig. 1 and 2B, col. 3, line 63 to col. 4, line 31).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahara et al in view of Amsden et al. Nagahara et al disclose a chemical mechanical polishing apparatus 10 comprising a chemical mechanical polishing cloth 16 for chemically mechanically polishing a workpiece 12, a polishing head 26 for holding and rubbing a

workpiece 12 with the chemical mechanical polishing cloth 16 and a polishing agent supply mechanism for supplying a polishing agent to the chemical mechanical polishing cloth 16 (note Fig. 1, 2, col. 4, line 6 to col. 5, line 14). However, Nagahara et al do not disclose the chemical mechanical polishing cloth including polishing projections having polishing having polishing faces arranged to come in contact with a workpiece for polishing the same, polishing agent passages, having bottoms, for introducing a polishing agent and one-stage step portions formed between the polishing faces of the polishing projections and the bottoms of the polishing agent passages. Amsden et al disclose a polishing cloth 10 for chemically mechanically polishing a workpiece comprising polishing projections 14 having polishing faces arranged to come in contact with a workpiece for polishing the same, polishing agent passages 16, having bottoms, for introducing a polishing agent and one-stage step portions 19 formed between the polishing faces of the polishing projections and the bottoms of the polishing agent passages (note Fig. 1 and 2B, col. 3, line 63 to col. 4, line 31). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Nagahara et al with the polishing cloth as disclosed by Amsden et al in order to efficiently and accurately polish highly finished workpiece.

Allowable Subject Matter

Claims 2 and 5 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: prior art of record fails to disclose or imply a polishing cloth or a chemical mechanical polishing apparatus comprising polishing projections projecting from a flat

pate portion of the polishing cloth, polishing agent passage formed by grooves in the flat plate portion, a one-stage step portion formed by a surface of the flat plate portion between the polishing face of the projection and a bottom of the polishing agent passage, as specifically recited by applicant's respective claims.

Response to Arguments

Applicant's arguments filed on 11 May 2001 have been fully considered but they are not persuasive. In response to applicant's argument that Amsden et al fails to teach at least one-stage step portions as cited in claim 1, as pointed out in the rejection above, Amsden et al disclose all limitations as cited in claim 1 specifically one-stage step portion in Fig. 2B, col. 3, lines 23-31.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

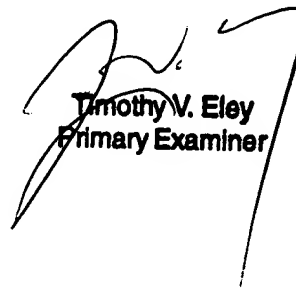
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V Nguyen whose telephone number is 703-305-0036. The examiner can normally be reached on M-F, 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail can be reached on 703-308-2687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3579 for regular communications and 703-305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

DVN
May 30, 2001



Timothy V. Eley
Primary Examiner